THE GREAT COLD TURKEY CHALLENGE

Report on an Evaluation of a Stop Smoking Campaign

CITY OF TORONTO
DEPARTMENT OF PUBLIC HEALTH

1983

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Acknowledgements

This study is the result effective teamwork. Laura Donatelli and Anna Chiarelli, students currently in the University of Toronto Masters of Health Sciences programme, very ably conducted the study, ran the analysis and wrote the report. Fred Goetler provided valuable assistance with the statistical analysis. Marilyn Bowers and Anne Moon gave willing and helpful consultation and comments. Lynn Elinson and Diana Baxter coordinated and supervised the research. The final production of the report was realized through the cheerful and capable cooperation of the clerical staff in Health Information Section.

EXECUTIVE SUMMARY

In January, 1983 the City of Toronto Department of Public Health conducted a stop-smoking Cold Turkey Campaign in response to a challenge from the City of Vancouver. Toronto was the winner after 2,203 Metro Toronto residents pledged to quit smoking compared to only 1,445 Vancouver residents. A follow-up telephone survey was conducted in June, 1983 to determine how successful City of Toronto participants had been in their attempts to quit, and to evaluate the usefulness of the Campaign.

Out of 617 eligible City of Toronto pledges, a sample of 104 was selected and contacted. 87 interviews were completed giving a response rate of 83.6%. Approximately 25% of the sample had successfully quit smoking (as of 5 months later); over 90% had stopped smoking for at least one day; and those who were still smoking had on average decreased slightly the number of cigarettes smoked per day (from 25.1 to 20.0). No significant associations were found between the length of time stopped smoking and any of the standard demographic or smoking characteristics.

The survey concluded that the Cold Turkey Campaign was successful in helping some smokers, but that the Campaign's format could be improved to be of greater assistance to a broader variety of smokers. The following recommendations were made:

1. The City of Toronto Department of Public Health should conduct a second Cold Turkey Challenge Campaign early in 1984.

2. The City of Toronto Health Department should once again coordinate the activities of the Cold Turkey Campaign or similar event with the Metro Toronto Interagency Council on Smoking and Health.

3. Campaign objectives should be defined clearly and priorized at the beginning of the program.

4. The City of Toronto Department of Public Health should invite other cities to join in the Cold Turkey Campaign.

5. The 1984 Campaign should encourage individual success (as defined by <u>any</u> decrease in smoking behaviour).

6. A follow-up survey to be conducted a full 6 months to 1 year later should be an integral part of the Campaign.

7. Pledge forms to be used in the Campaign should be standardized to ensure each individual is pledging to stop in the same way.

8. The same staff member in the health information section should collect and count pledges, and do all subsequent evaluation of the Campaign.

9. Follow-up support should be considered after the Campaign to encourage those who are trying to quit.

10. Findings of the survey should not be publicly released until the final report is completed.

11. That Department Management Team send this report on to the Local Board of Health for their information.

INTRODUCTION

In January 1983, the City of Toronto Department of Public Health (DPH) in cooperation with the Metro Toronto Interagency Council on Smoking and Health conducted a Cold Turkey Challenge Campaign to encourage smokers to quit smoking. While the DPH has always had an ongoing smoking prevention program, this Campaign was initiated by a challenge from the Mayor of Vancouver to the Mayor of Toronto. The challenge was in the form of a contest: the winner would be the city that signed up the greatest number of smokers pledging to quit by the end of January. The timing of the Campaign also coincided with National Non-Smoking Week sponsored by the Canadian Council on Smoking and Health.

Cold Turkey Challenge pledge forms were printed in the Toronto Star and distributed at City Hall, in shopping malls, in DPH offices, and through associated agencies of the Metro Toronto Interagency Council on Smoking and Health. A live turkey was donated by the Turkey Marketing Board, and under the name of C.T., became the Campaign's mascot and symbol. Various Toronto celebrities also helped draw attention by publicly signing a pledge.

The Campaign was strongly supported by the Toronto media. During January, newspapers ran a number of articles on the dangers of smoking, the format of the Campaign, and "how to quit tips" for participants. Local radio and television stations also covered Campaign activities, especially toward the end of the month.

Weedless Wednesday, a one day non-smoking promotion activity traditionally conducted in January by the Canadian Council on Smoking and Health, took place on the 26th of the month and highlighted the Campaign. On that day, the Toronto Star printed the names of all the people who had already signed the pledge. A hotline was set up for the day at the Candian Cancer Society offices so that Cold Turkey participants could get advice and support from health professionals. In addition, there was a full day's program of "distracting" entertainment, free massages, tip sheets, balloons, and raffle prizes (donated by local merchants).

Throughout the month, City residents were kept informed of Toronto's status in the contest. In addition, a major prize was given to the person who collected the most pledges by January 31st. At the close of the Campaign, 2,203 Torontonians had vowed to quit compared to only 1,445 Vancouverites, a "victory" for Toronto.

A preliminary review of the Cold Turkey Challenge Campaign suggests that the program was successful in terms of media attention, activity level, and sheer number of pledges. However, the real success of a stop smoking campaign should also be measured by results. An evaluation of these results, therefore, was undertaken by the Department of Public Health during the summer of 1983, when City of Toronto participants were surveyed to determine how they fared in their attempts to stop smoking. The following report is a description of the methodology, results, and conclusions of that evaluation. Recommendations for future campaigns also are included.

PURPOSE OF THE SURVEY

The overall purpose of the Cold Turkey Campaign was to reduce the number of smokers among City of Toronto residents. The purpose of the evaluation was to determine whether the Department of Public Health had been successful. In addition, the evaluation was conceived as a means of determining methods for improving future campaigns. The specific objectives of the survey, therefore, were the following:

Objective 1: to determine the percentage of people who successfully stopped smoking;

Objective 2: to examine changes in smoking behaviour of those still smoking;

Objective 3: to compare the characteristics of successful quitters* with other participants;

Objective 4: to determine the demographic and smoking characteristics of the Cold Turkey Challenge Campaign participants;

Objective 5: to determine if the Cold Turkey Challenge Campaign was influential in helping people to stop or reduce their smoking habit;

Objective 6: to determine what other methods smokers consider helpful when trying to stop

* People who stopped smoking after signing the pledge and who had not smoked up to the time of the survey (approximately 5 months) were classified as successful quitters.

METHODOLOGY

The target population for this survey was defined as all the individuals who returned stop-smoking pledge forms to the Department of Public Health during the Campaign, who reside within Toronto city limits, and whose pledges supplied the necessary information (i.e. name, phone number, address) for follow-up.

A total of 2,203 pledges were submitted. Table 1 is a breakdown of pledges for the entire Campaign.

Table 1: Breakdown of Pledges for the Campaign

1551	pledges from outside of the City of Toronto
35	pledges excluded because of incomplete information
617	eligible pledges
2203	Total pledges

Breakdown of Eligible Pledges:

a)	272	newspaper pledges printed in the Toronto Daily Star
b)	320	City Hall pledges (distributed around the city at shopping malls, etc.)
c)	25	pledges that were telephoned in and filled out by Department of Public Health staff) or pledges submitted in letter form
	617	

Using a systematic sampling system every 6th pledge was extracted from the eligible group to give a sample size of 104 pledges (approximately 16.7% of the target population). The sample size was estimated to give a confidence interval of 95%, and a precision estimate of ±0.10.

A telephone survey was chosen as the method of data collection for the following reasons:

a) such a survey is relatively inexpensive;

b) data can be gathered fairly quickly;

c) repeated calls should allow for a high response rate. (A response rate of approximately 75% was anticipated.)

A questionnaire was developed covering three broad areas: 1) smoking history; 2) factors influential in smoking cessation; and 3) demographics. (See Appendix 1) The majority of questions were close-ended and precoded. Responses to the few open-ended questions were tabulated, grouped, and coded after the interviewing was completed.

The questionnaire was pretested on smoking friends, colleagues, and on out-of-City participants of the Campaign. Each interviewer was given 52 pledges to contact. In order to minimize language difficulties, all respondents with Italian last names were assigned to the interviewer who could speak Italian.

The survey was conducted on weekdays from June 13 to June 24 - just over 4 1/2 months after the Campaign. Calls were made during regular office hours and in the evenings. If a line was busy, the interviewer tried to call back twice more at 15 minute intervals. 3 busies or 6 rings equalled 1 attempt. A maximum of 15 attempts were made to interview each respondent. The interviewers followed a systematic phoning order unless advised to try calling at a more convenient time.

As one of the survey questions, the respondent's address was verified to ensure City residency at the time of signing the pledge. If a business address was given on the pledge form, the respondent's home address was used as a basis for including/excluding the interview. If excluded, a replacement pledge was then drawn and interviewed in order to keep the sample size constant.

After all the interviewing was completed, the data were entered on the City Hall computer. The results were then analyzed using the Statistical Analysis System (SAS).

INTERVIEW RESULTS

The survey sample consisted of 104 Cold Turkey participants. Table 2 indicates a summary of attempts to contact and interview these people. A response rate of 83.6% was achieved. 14.4% of the participants were classified as non-respondents. This category included 2 refusals (for a refusal rate of 1.9%) and 2 "bogus" pledges (one individual had not submitted his own name and one wrong number was given).

Table 2: Summary of Attempts to Locate Cold Turkey Registrants

RESULT	Number	%
Completed interview	87	83.6
Refusals	2	1.9
Unavailable during study period	4	3.8
No answer*	5	4.8
Telephone not in service	1	1.0
Moved	3	2.9
Individual had not submitted own name	1	1.0
Wrong number given	1	1.0
TOTAL	104	100.0

* After 15 attempts

DEMOGRAPHIC AND SMOKING CHARACTERISTICS

Figure 1 indicates the age distribution of respondents. They ranged in age from 18 to 74 years of age but were primarily in their late twenties and early thirties.

Table 3 shows that the male|female ratio is 1:2 among the respondents.

The marital status of the respondents is examined in Table 4. Almost one-half of our sample had never married, approximately one-third were currently married, and the remainder were widowed, divorced or separated.

Occupational and educational status are examined in Figures 2A and 2B. Approximately 30% of respondents were in clerical occupations, approximately 25% were in professional or paraprofessional occupations, and fewer than 20% were in manual or technical occupations. The highest education level achieved for almost half of the respondents was a secondary diploma.

Table 5 indicates that 80% of respondents were born in Canada.

The number of years that respondents had smoked is examined in Table 6. Over 75% had smoked 10 years or more. Approximately 22% had smoked 30 years or more.

Figure 3 demonstrates the ages when respondents first started smoking, separated out by sex. It can be seen that males generally began at a younger age with a range from age 9 to age 21 and a peak starting age of 16. Starting age for females ranged from age 8 to age 30 with a peak age of 18. It should be noted that the female subsample (n=59) is twice as large as the male subsample (n=28).

AGE DISTRIBUTION OF RESPONDENTS

Figure 1

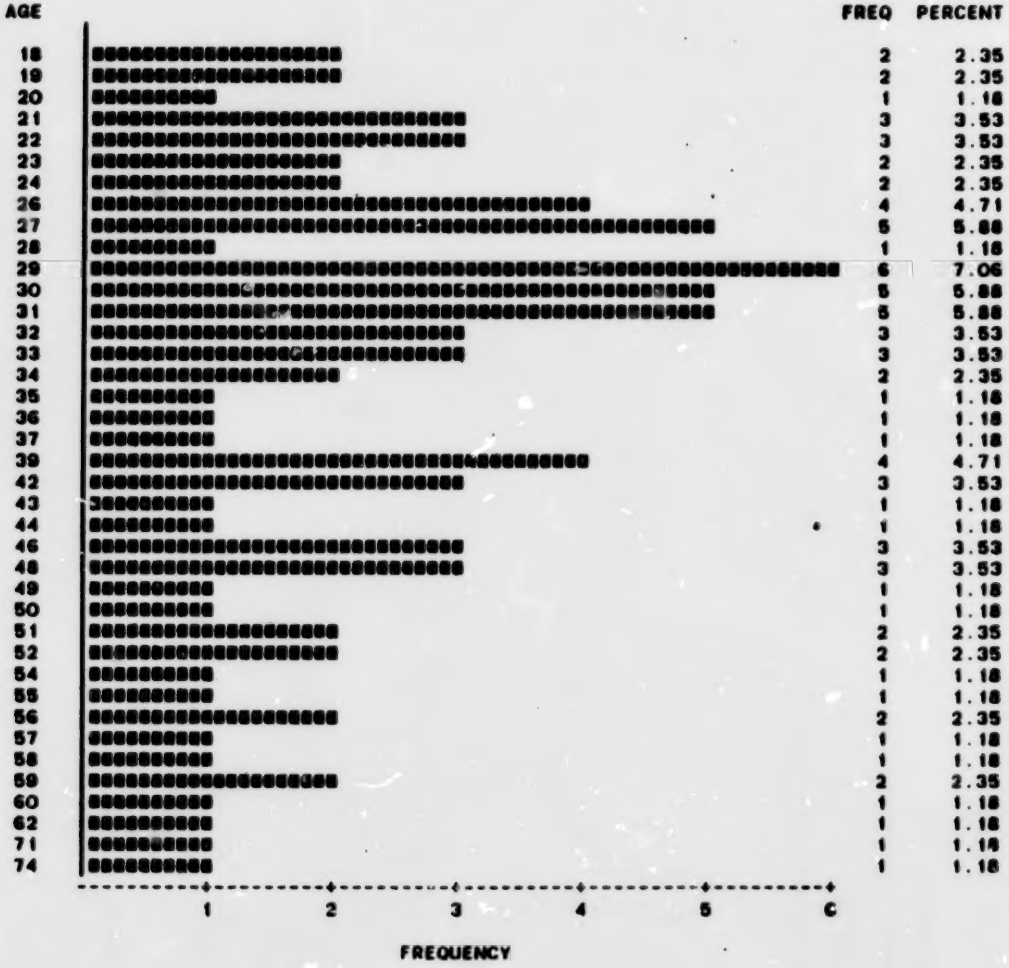


Table 3: Sex Distribution of Respondents

SEX	Number	%
Male	28	32.2
Female	59	67.8
TOTAL	87	100.0

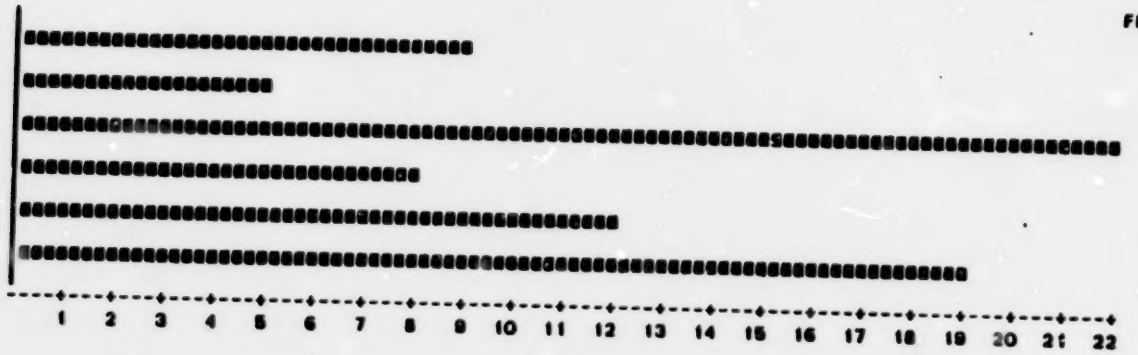
Table 4: Marital Status of Respondents

STATUS	Number	%
Never Married	40	46.0
Married	30	34.5
Divorced or Separated	9	10.3
Widowed	7	8.0
Refused to Answer	1	1.1
TOTAL	87	99.9*

* Does not equal 100.0% because of rounding

OCCUPATIONAL STATUS OF RESPONDENTS

Figure 2A



EDUCATIONAL STATUS OF RESPONDENTS

Figure 2B

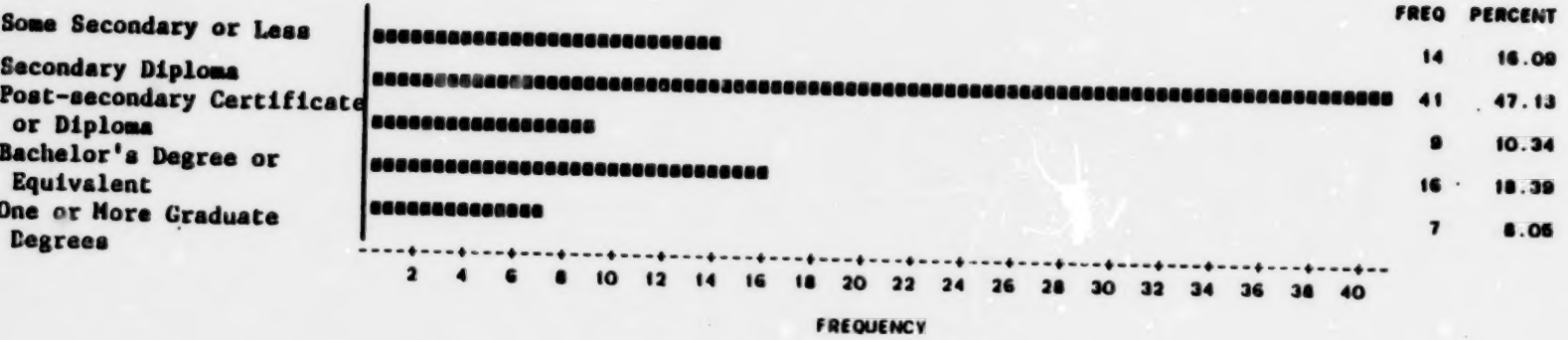


Table 5: Place* of Birth of Respondents

PLACE	Number	%
Canada	70	80.5
Western Europe	11	12.6
Eastern Europe	4	4.6
Asia	1	1.1
South America	1	1.1
TOTAL	87	99.9+

* Respondents were asked their country of birth and the responses were grouped

+ Does not equal 100.0% because of rounding

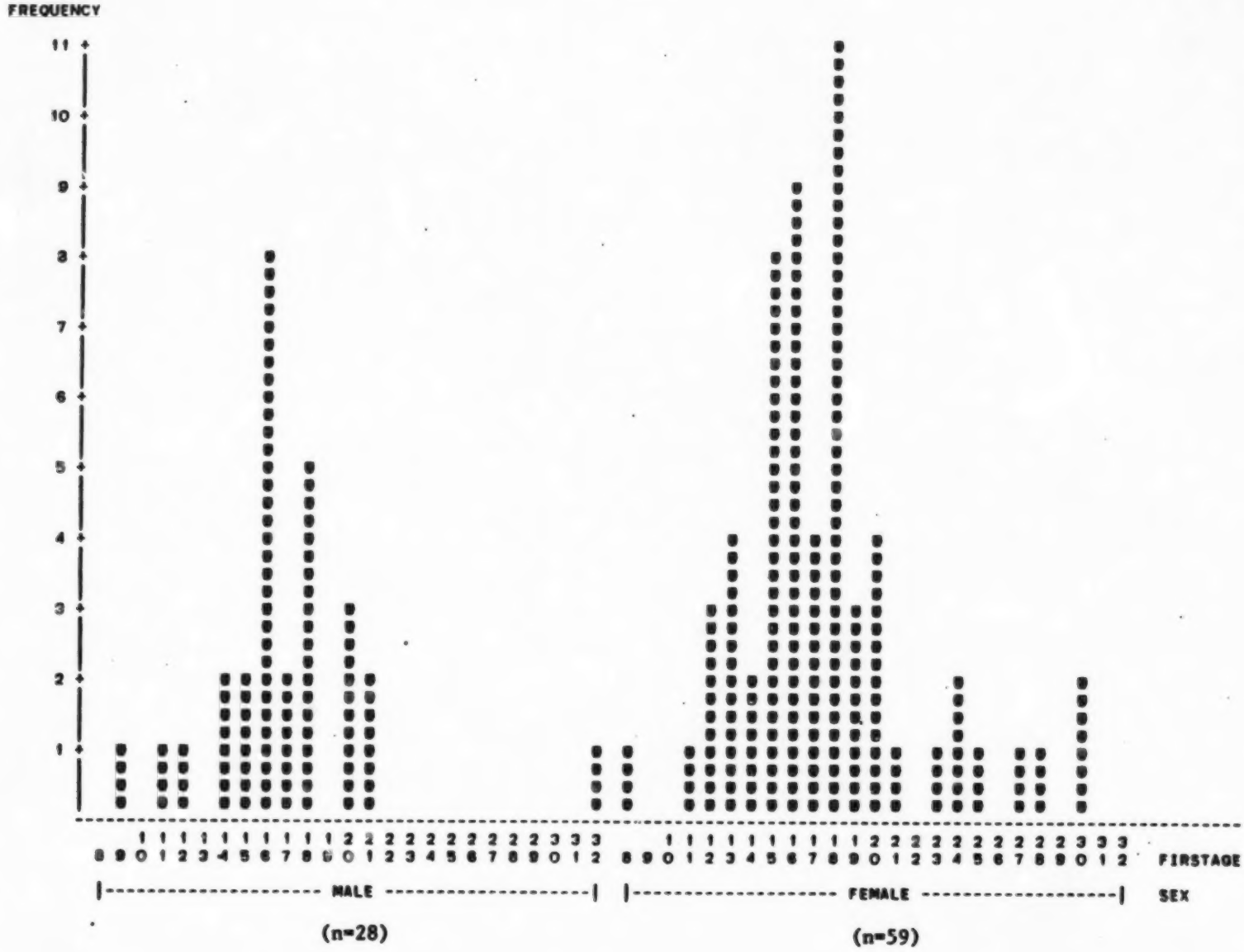
Table 6: Number of Years Respondents Had Smoked

NUMBER OF YEARS	NUMBER	%
0 - 4	6	6.9
5 - 9	14	16.1
10 - 19	31	35.6
20 - 29	15	17.2
30+	19	21.8
Don't Know	2	2.3
TOTAL	87	99.9*

* Does not equal 100.0% because of rounding

AGE WHEN FIRST STARTED SMOKING, BY SEX

Figure 3



CHANGES IN SMOKING BEHAVIOUR

Cold Turkey Success Rate

There were 22 people out of 87 respondents who successfully stopped smoking, giving a success rate of 25.3%. (2 cigar and pipe smokers who signed pledges but were not successful quitters are included in this total of 87.)

There were 7 respondents out of the 87 who stated they did not try to stop smoking. Therefore, if these people are removed from the calculation, a success rate of 27.5% is arrived at.

However, given the competitive nature of the Cold Turkey Challenge Campaign, it seems reasonable to use the more conservative rate (25.3%) when evaluating the program's success.

When looking at the respondent attempts to stop smoking, Table 7A indicates that 8% did not try to quit at all. Of those who did try to quit, approximately 60% tried once (since January), and 30% tried more than once. In addition, 75% of those who tried to quit used the Cold Turkey approach to quitting. (See Table 7B.)

Again excluding those who did not try to quit, Table 8 shows that more than 90% stopped for one day or longer.

In focussing on current smokers (people who were still smoking at the time of the survey), the number of cigarettes they smoked before the Campaign minus the number of cigarettes they smoked after showed a mean difference of 5.123 cigarettes per day. A 2 tailed t-test reveals this to be a significant decrease in cigarettes smoked ($p<0.05$).

Since this decrease is based on a recollection of past habits, there is a possibility of memory error. In order to check this, the number of cigarettes smoked as indicated on the pledge form (signed in January) was compared to the number of cigarettes smoked in January as remembered 4 1/2 months later. A 2 tailed t-test of the mean difference of 1.21 is not significant ($p>0.05$), suggesting that there is little or no memory bias.

Table 9 examines the tar/nicotine index of the cigarettes smoked by successful quitters before the Campaign. Over 80% smoked a cigarette rated by the interviewers as medium or heavy tar/nicotine content.

When looking at current smokers, the mean difference in the tar/nicotine index before the Campaign minus the tar/nicotine index after the Campaign is only 0.05 and a 2 tailed t-test shows this is not a significant change ($p>>.05$).

Table 7A: Respondent Attempts to Stop Smoking - Number of Times

TIMES TRIED	Number	%
Never Tried	7	8.0
Tried Once	53	60.9
Tried More than Once	27	31.0
TOTAL	87	99.9+

Table 7B: Respondent Attempts Stop Smoking - Method

HOW TRIED	Number	%
Cold Turkey	61	76.2
Gradually	13	16.2
Both	6	7.5
TOTAL	80*	99.9+

* Excludes 'Never Tried'

+ Does not equal 100.0% because of rounding

Table 8: Length of Time Respondents Stopped Smoking

TIME	Number	%
Less than 1 Day	6	7.5
1 Day	3	3.8
Less than 1 Week	10	12.5
1 Week to Less than 2 Months	30	37.5
2 Months to Less than 4 Months	10*	12.5
Still Not Smoking	21	26.2
TOTAL	80+	100.0

* This figure includes one ex-smoker who did not successfully quit until the end of February, and therefore had only stopped for 3 1/2 months at the time of the interview.

+ The 7 respondents who did not try to stop were not included in this table.

Table 9: Tar/Nicotine Index* of Cigarettes Smoked by Successful Quitters Before Campaign

Tar/Nicotine Index	Number	%
Light	4	18.1
Medium	8	36.4
Heavy	10	45.4
TOTAL	22	100.0

* Respondents were asked the type and length of cigarettes smoked and the responses were grouped into the above categories based on tar and nicotine levels.

COMPARISON OF EX-SMOKERS VERSUS CURRENT SMOKERS

In order to determine those characteristics most highly associated with quitting, we chose to examine a number of variables. These variables are listed in Table 10. None of the associations were statistically significant (alpha=0.05). However, selected variables (age, sex and amount smoked before Campaign) have been chosen for illustrative purposes and tables are included in Appendices 2 through 4.

Table 10: Variables Tested for an Association with Quitting

- Age group by Smoking status
- Sex by Smoking status
- Amount smoked before campaign by Smoking status.
- Sex by Length of time stopped smoking
- Marital status by Smoking status
- Marital status by Length of time stopped smoking
- Age group by Length of time stopped smoking
- Employment status by Smoking status
- Employment status by Length of time stopped smoking
- Occupational status by Smoking status
- Educational status by Length of time stopped smoking
- Number of years smoked by Smoking status
- Number of years smoked by Length of time stopped smoking
- Manner of quitting by Smoking status
- Manner of quitting by Length of time stopped smoking
- Live with Smokers by Length of time stopped smoking
- Brand smoked before by Smoking status
- Difficulty of stopping by Length of time stopped smoking
- Techniques used to stop by Length of time stopped smoking
- Where got pledge by Smoking status
- Smoking status of friends/co-workers by Smoking status

* The following associations were tested by a chi square analysis and none were found to be significantly associated (alpha=0.05).

+ In many cases, the cell sizes were too small for analysis. Analysis after collapsing of cells also failed to show significance.

THE COLD TURKEY CAMPAIGN

The Cold Turkey Campaign was publicized widely. Table 11 lists some of the methods by which respondents heard about it. Approximately two-thirds of all respondents read something about the Campaign in the newspaper, approximately one-third heard something about it on the radio.

Of the respondents who tried to stop smoking, approximately three-quarters found the Campaign to be helpful (See Table 12). Most felt it gave them incentive or that they were encouraged by the group support. Table 13 lists the responses of the one-quarter respondents (25% of those interviewed) who did not find the Campaign helpful. This was often because they paid no attention to the Campaign, or because they had resolved to quit for other reasons.

It is interesting to notice on these 2 tables that the Cold Turkey method and the gradual method of cutting down were both cited as "the only way to quit", and for these reasons the Campaign was or was not considered helpful.

Table 14 shows that approximately two-thirds of respondents were encouraged by friends or relatives in their attempt. Other than receiving this encouragement, there was no one activity or technique commonly employed.

In the questionnaire, respondents were asked if they had any general advice for the Department of Public Health. Table 15 is a tabulation of the main responses given to this question. As can be seen, there was a range of ideas expressed.

Table 11: How Respondents Heard About the Cold Turkey Campaign

65.5%	read information about it in the newspaper
31.0%	heard information about it on the radio
20.7%	heard information about it at work
14.9%	heard information about from friends or relatives
10.3%	heard information about it on the television
10.3%	saw information about it in a display
1.1%	don't remember how they heard about it

(Note: Respondents may have heard about the campaign from more than one source. Therefore, the above percentages do not add up to 100.0%).

Table 12: Ways in Which the Cold Turkey Campaign was Helpful

77.5% (62 people) of respondents questioned found the campaign helpful*

Of this group:

40.3% felt it gave them incentive

24.2% were encouraged by the group support

9.7% said it increased their awareness

8.1% did not know why it was helpful

4.8% were motivated by the deadline

4.8% responded to the group challenge

4.8% said that Cold Turkey was the only way to quit

3.2% liked the novelty of the campaign

* The 7 respondents who did not try to quit were not asked this question.

Table 13: Ways in Which the Cold Turkey Campaign was not Helpful

22.5% (18 people) of respondents questioned did not find the campaign helpful*

Of this group:

27.8% paid no attention to the campaign

27.8% felt that quitting was a personal decision

16.7% acted on advise from a health professional

11.1% felt the campaign on its own was not helpful/needed other incentives and support

11.1% did not know why it wasn't helpful

5.6% said that gradually cutting down was the only way to quit

* The 7 respondents who did not try to quit were not asked this question.

Table 14: Other Techniques Used in Stop-Smoking Attempts*

62.5%	were encouraged by friends or relatives
27.5%	used no stop-smoking technique other than participation in the Cold Turkey Campaign
16.2%	visited or got advice from health professionals
10.0%	altered their food or drinking habits
8.8%	used a stop-smoking kit or guide
5.0%	used a special stop-smoking gum or mouthwash
5.0%	chewed regular gum or toothpaste
3.8%	joined a stop-smoking group
3.8%	engaged in miscellaneous activities (i.e. bet money they would quit, took up needlepoint)
2.5%	increased the amount of exercise they did

* The 7 respondents who did not try to quit were not asked this question.

(Note: Respondents may have used more than one technique. Therefore, the above percentages do not add up to 100.0%).

Table 15

Question:

Is there anything you can think of that the Public Health Department could do to help people stop-smoking?

Selected Responses:

- Continue with other Cold Turkey Challenge Campaigns, perhaps could challenge other cities.
- Sponsor self-help groups, workshops or stop-smoking clinics.
- Publish the results of this survey in the newspaper. It would be nice to know how others did with their pledge.
- By use of the media, keep the public aware of the dangers of smoking (e.g. pictures of diseased lungs, etc.)
- Introduce stop-smoking programs into primary schools.
- Continue to distribute stop-smoking posters and literature on the subject.
- Put pictures or names of individuals who pledged into the newspaper.
- It is completely up to the individual to stop-smoking, there is not much the Public Health Department can do.
- Attempt to ban cigarettes or to raise their price.
- Non-smoking areas and signs in public places are a great idea.
- Individuals running stop smoking courses should be ex-smokers.
- Scare tactics are no good. Instead, should emphasize the health benefits of quitting.

DISCUSSION AND RECOMMENDATIONS

According to the results of this evaluation, we have estimated that 25% of those who had pledged to stop smoking in the Cold Turkey Challenge were still non-smokers after 4 1/2 months. In addition, 92.5% of respondents quit for at least one day, and there was a significant decrease in the mean number of cigarettes smoked after 4 1/2 months. Given the sampling and interview method used, and the high response rate, we believe these result can easily be generalized to all Cold Turkey participants in the City of Toronto. The response rate for the survey was a respectable 83.6% and this compares favorably to a 61.9% response rate achieved by Vancouver's 1982 Cold Turkey Follow-up Survey.[1] While we cannot eliminate the possibility of a non-respondent bias, most of the non-respondents were people who were difficult to contact (a number had moved or were on holidays) and this characteristic would appear independent of the ability to stop smoking. It must be recognized that on the whole we had a self-selected and motivated target population which made the interviewing process somewhat easier.

The demographic results of the survey present a picture of the average participant as a female Canadian born young adult, possibly still single, with a clerical or paraprofessional occupation, having a high school diploma or higher degree, and who has been a smoker for over 10 years (starting around age 18).

This, however, is likely not a picture of the average Toronto smoker, and this suggests that only a certain type of smoker participated in the Campaign. This might be a consequence of the format, with its emphasis on the media, or may just reflect the type of smoker interested in stopping in a group effort.

To a certain extent, the random sampling and the sex of participants who responded distorted the sex distribution. (40% of the pledges were from males, 46% were from females, and in 14% the sex was unknown. 35% of the sample were male, 62% female, and 3% unknown. 32% of the respondents were male and 68% female.) While it is not unusual to have a low male|female ratio of participants in this type of program, our method of interviewing both day and evening hours tried to maximize the likelihood of reaching males from our sample.

The City of Toronto has an estimated 186,000 smokers; 617 of them sent in pledge forms (about one in every 300). The Cold Turkey success rate is estimated at approximately 25%. That would suggest that over 150 people quit smoking after signing the pledge. (Of course, we shouldn't take credit for all of these successes; a number of these people would likely have stopped regardless of the Campaign.) The 1982 Vancouver Cold Turkey follow-up survey found that 93% of respondents stopped smoking for one day or longer, and 22% were still not smoking 11 months later.[1] In contrast, a recent electronic media-based smoking

cessation clinic in the United States found only 10.5% were still not smoking at the end of 3 months.[3] Our survey findings that 92.5% of respondents quit for one day or longer, and 25% were still not smoking 4 1/2 months later are comparable to Vancouver's, and considerably better than the American program.

Another encouraging sign is that respondents who were still smoking at least had cut down on the number of cigarettes smoked per day. Since all this information came from self-reports, a certain amount of skepticism is in order. However, we tried to arrange the questionnaire to minimize reporting bias, and the check on remembered number of cigarettes smoked (See Results page 23) suggests there is little memory bias.

Unfortunately, none of the associations we looked for were found to be significant. One explanation may be the small sample size we were working with; we may have tried to over-analyze our data. An obvious problem with the survey is the lack of a control group. Had we compared our smoking participants with a representative sample of a southern Ontario smoking population (outside of Metro Toronto to reduce the chance they would have heard about the Campaign), we may have found some significant differences.

One of the associations we tested was the smoking status of participants who had utilized different pledge types. We expected that smokers who bothered to cut out and mail in newspaper forms would be more highly motivated and more likely to quit than smokers who had casually filled out a form at a shopping mall as

they were passing by. However, this was not the case, suggesting that there was an equal motivation (or lack of motivation) between the different pledge types.

In general, according to their self-reports, respondents found the Campaign to be quite helpful. It is important to remember that even those who did not successfully quit this time around had their level of consciousness raised, and hopefully will try again and eventually succeed. The Department of Public Health estimates that the Cold Turkey Campaign cost approximately $10,000. A certain proportion of this expense was due to the Weedless Wednesday events. While it is true that those activities attracted quite a bit of attention, it is questionable whether there were many Cold Turkey participants in the audience. (None of the survey respondents mentioned that this helped them in any way.)

An important problem with the survey was the manner in which the press published the results. During the 5th World Conference on Smoking and Health held in Winnipeg in early July, preliminary results of the survey were released to the press (See Appendix 5). Unfortunately, the media reported interim findings as final results, and some incorrect conclusions were drawn, and information was often misinterpreted (i.e. with respect to sample size, number of respondents, number of successful quitters, length of time quitters had stopped smoking, and association of sex with smoking status). In future, only final results should be publicly released.

By anticipating such related events and timing the evaluation accordingly, press reports could have additional veracity and impact.

After considering the results of this evaluation, it seems appropriate to recommend another Cold Turkey Campaign in early 1984. However, there are a number of changes that we feel should be made. The Campaign should include an evaluation component, preferably a full 6 months to 1 year later. With this in mind, pledge forms should be standardized so that all participants are signing an identical pledge, and the same Department of Public Health members should handle the collection, counting of pledges and subsequent evaluation of the Campaign. Campaign objectives should be stated clearly from the start, and kept in mind throughout the program. A decision should be made whether it is more important to win the competition, or to encourage a serious stop-smoking attempt from resident smokers. We felt that in the 1983 Campaign the rush for quantity of pledges adversely affected the quality of the program. Nevertheless, it is true that the 2 city contest attracts attention. Perhaps in 1984, a number of health departments could simultaneously run such campaigns, either in other provinces, or primarily in southern Ontario.

From the comments of respondents, it seems that smokers most appreciate a group challenge, but perceive it as an individual competition. Since smoking is such a difficult habit to break, success should not be perceived solely in terms of quitting, but

rather any diminishment of the smoking behaviour. Many smokers must try a number of times to quit, and the attempt itself should be regarded as a step forward.

Media coverage of the Campaign could perhaps be extended after the end of the month. Many smokers said they would have enjoyed a progress report a few weeks later to bolster their sagging resolve or encourage them to try again. As well, the hotline should be kept active for some time after the Campaign, and perhaps ex-smokers could either counsel or give advice through the media, so that practical "how-to" tips are readily available to the struggling quitter.

In summary, here are the following recommendations:

1. The City of Toronto Department of Public Health should conduct a second Cold Turkey Challenge Campaign early in 1984.

2. The City of Toronto Department of Public Health should once again coordinate the activities of the Cold Turkey Campaign or similar event with the Metro Toronto Interagency Council on Smoking and Health.

3. Campaign objectives should be defined clearly and priorized at the beginning of the program.

4. The City of Toronto Department of Public Health should invite other cities to join in the Cold Turkey Campaign.

5. The 1984 Campaign should encourage and individual success (as defined by any decrease in smoking behaviour).

6. A follow-up survey to be conducted a full 6 months to 1 year later should be an integral part of the Campaign.

7. Pledge forms to be used in the Campaign should be standardized to ensure that each individual is pledging to stop in the same way.

8. The same staff member in the health information section should collect and count pledges, and do all subsequent evaluation of the Campaign.

9. Follow-up support should be considered after the Campaign to encourage those who are trying to quit.

10. Findings of the survey should not be publicly released until the final report is completed.

11. That Department Management Team send this report on to the Local Board of Health for their information.

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APPENDIX 1

SURVEY QUESTIONNAIRE

Cold Turkey Challenge Campaign Survey

A. Questionnaire number ___ (_ _ _)

B. Date of Interview Y Y M M D D (_ _) (_ _) (_ _)

C. Pledge Code
1. White Form (_)
2. Newspaper Form
3. Other

(If 2 or 3, "X" out question 1)

D. Number of Cigarettes Smoked on Pledge Form (_ _)
1. Number of cigarettes _ _
2. Don't know (Code = 99) _ _

E. Disposition of Interview
1. Completed (_)
2. Partially completed
3. Refused
4. No answer
5. Unavailable
6. Moved
7. Telephone not in service
8. Wrong number
9. Wrong name

Interviewer: If respondent is not home, or if timing is inconvenient, try to arrange time for callback.

Call back:

Date	Time
Date	Time
Date	Time

Introduction

Hello. My name is _____ and I'm calling from the Department of Public Health at Toronto City Hall. You may remember signing a pledge form last January when you participated in the Cold Turkey Challenge Campaign. Your name has been randomly chosen to be a part of our follow-up survey. I have a few questions that should only take 5-10 minutes of your time. Your participation is voluntary, and of course, your responses will be confidential. Whether or not you stopped smoking, the information you give us will be of great help in planning future stop-smoking programs. Would you mind if I asked you a few questions?

(If no) - Oh, I'm sorry to hear that. We were hoping that everyone would be able to participate. Would it help if I called back at a more convenient time?

(If no again) - Thank you for your time.

1. Do you remember where you got your pledge form? (_ _)

PROBE _____ Code Later
Code

_ _

---

2. How did you hear about the Toronto stop-smoking campaign? Was it from,

READ LIST

MORE THAN ONE ANSWER IS ACCEPTABLE

A.	Newspapers	1	( )
B.	Radio	2	( )
C.	Television	3	( )
D.	Relatives or friends	4	( )
E.	At work	5	( )
F.	Other (please specify)	6	( )

First, we'd like to get some information about your smoking history.

---

3. How old were you when you first began to smoke cigarettes regularly? (_ _)

PROBE FOR BEST ESTIMATE

A.	Years old	_ _
B.	Refused (Code = 88)	_ _
C.	Don't know (Code = 99)	_ _

---

4. At the present time, how many cigarettes do you smoke daily?

(_ _)

1 SMALL PACK = 20 CIGARETTES
1 LARGE PACK = 25 CIGARETTES

A.	Number of Cigarettes (If A = 0, GO TO QUESTION 8)	_ _
B.	Refused (Code = 88)	_ _
C.	Don't know (Code = 99)	_ _

---

5. What brand of cigarettes do you smoke now? (_ _)

_____ __ __
Brand Name Code Later

6. Are they: (_)

READ LIST

A. Regular..... 1
B. King Size..... 2
C. 100 mm..... 3

7. Are they: (_)

READ LIST

A. Filter..... 1
B. Non Filter..... 2

8. As you know, the Cold Turkey Challenge took place in January. Do you remember the number of cigarettes you smoked daily before you signed the pledge?

(_ _)

1 SMALL PACK = 20 CIGARETTES
1 LARGE PACK = 25 CIGARETTES

A. Number of Cigarettes..... _ _
B. Refused (Code = 88)..... _ _
C. Don't know (Code = 99)..... _ _

9. What brand of cigarettes did you smoke then? (_ _)

_____ __ __
Brand Name Code Later

10. Were they: (_)

READ LIST

A. Regular..... 1
B. King Size..... 2
C. 100 mm..... 3

---

11. Were they: (_)

A. Filter..... 1
B. Non-Filter..... 2

---

12. Between January and now, have you tried to stop smoking? (_)

A. Yes..... 1
B. No, GO TO QUESTION 21..... 2

---

13. How many times have you tried to stop smoking, since January? (_ _)

A. Number of times..... _ _
B. Refused (Code = 88)..... _ _

---

14. Did you try to stop: (_)

A. Cold Turkey, that is all at once?..... 1
B. By gradually cutting down?..... 2

---

15. Between signing your pledge and now, what was the longest period of time you stopped smoking? (_)

A. Less than 1 day..... 1
B. 1 day..... 2
C. Less than 1 week..... 3
D. 1 week - 2 months (less 1 day)..... 4
E. 2 - 4 months (less 1 day)..... 5
F. Still not smoking..... 6

---

16. How difficult did you find trying to stop smoking? (_)

READ LIST

A. Not at all..... 1
B. Slightly..... 2
C. Somewhat..... 3
D. Very..... 4

Now, I'd like to ask you a few questions about some of the things that might have influenced you as you tried to stop smoking.

---

17. Do you think that the Cold Turkey Campaign helped you to stop smoking? (_)

A. Yes..... 1
B. No, GO TO QUESTION 19..... 2

---

18. In what ways was the campaign helpful? (_ _)

Code Later

(GO TO QUESTION 20)

---

19. Why do you feel the campaign was not helpful? (_ _)

Code Later

20. Were there other things that you did to try and stop smoking?

READ LIST

For example:

MORE THAN ONE ANSWER IS ACCEPTABLE

A. Did you join a stop-smoking group?..... 1 (_)

B. Did you visit or get advice from a health professional?..... 2 (_)

C. Were you encouraged by friends and/or relatives?..... 3 (_)

D. Did you use a stop-smoking kit or guide?..... 4 (_)

E. Was there something else that you did? (Specify)..... _ _ (_ _)

F. None of the above..... 6 (_)

---

21. Do you live with smokers? (_)

A. Yes..... 1
B. No..... 2

---

22. If you are employed, do more than half of your co-workers smoke? (_)

A. Yes, GO TO QUESTION 24..... 1
B. No..... 2
C. Not employed, GO TO QUESTION 24..... 3

---

23. Do <u>any</u> of your co-workers smoke? (_)

A. Yes..... 1
B. No..... 2

---

24. Do more than half of your friends smoke, that is friends you see at least once a week? (_)

A. Yes, GO TO QUESTION 26..... 1
B. No..... 2

---

25. Do any of these friends smoke? (_)

A. Yes..... 1
B. No..... 2

---

26. The Department of Public Health is considering whether to run a stop-smoking course on television. Would that be something you think you might watch?

ASK ONLY THOSE STILL SMOKING

A. Yes..... 1
B. No..... 2

---

27. How do you get most of your health information? (_)

READ LIST

A. Radio..... 1
B. Television..... 2
C. Newspapers..... 3
D. Magazines..... 4
E. Friends and or Relatives..... 5
F. Health Professionals..... 6

And now to the last section of the questionnaire. I have a few final questions that I'd like to ask about you.

---

28. Is your address still: (read from pledge form)

Verification _____ Code Later (_)
Address

In City..... 1
Out of City.... 2

---

29. What is your date of birth?

(_ _) (_ _) (_ _)

Y Y M M D D

---

30. What is your country of birth? (_ _)

A. Canada, GO TO QUESTION 32..... 1
B. Other (specify).....

_____ _ _

Code Code Later

---

31. For how many years have you lived in Canada? (_ _)

PROBE FOR BEST ESTIMATE

A. Number of Years..... _ _
B. Refused (Code = 88)..... _ _

---

32. What is your marital Status? Are you— (_)

READ LIST

A. Married..... 1
B. Widowed..... 2
C. Divorced or separated..... 3
D. Never married..... 4
E. Refused..... 8

---

33. Are you currently: (_)

READ LIST

A. Employed outside the home..... 1
B. Retired..... 2
C. Unemployed..... 3
D. Student, GO TO QUESTION 35..... 4
E. Homemaker, GO TO QUESTION 35..... 5
F. Refused..... 8

---

34. What is (was) your usual occupation or job? (_ _)

Code

Code Later

35. What is the highest level of school you completed? (_)

A. Some secondary or less..... 1
B. Secondary diploma..... 2
C. Post secondary certificate or diploma.... 3
D. Bachelor's degree or equivalent..... 4
E. One or more graduate degrees..... 5
F. Refused..... 8

36. Sex of Respondent: (_)

ONLY ASK RESPONDENT IF UNSURE

A. Male..... 1
B. Female..... 2

37. Is there anything you can think of that the Public Health Department could do to help people stop smoking?

This concludes the interview. Do you have any comments or questions that you would like to ask me?

Thank you very much for your assistance.

APPENDIX 2

TABLE OF CURRENT SMOKING STATUS BY AGE GROUP

TABLE OF CURRENT SMOKING STATUS BY AGE GROUP

	Ex-smokers	Current Smokers	Total
0-24	4	11	15
25-49	12	41	53
50+	6	11	17
Total	22	63	85*

Independence was tested with a chi square statistic (d.f.=2) and was not found to be significant at the alpha=0.05 level.

* Two respondents refused to give their ages and therefore are not included in this table.

APPENDIX 3

TABLE OF CURRENT SMOKING STATUS BY SEX

TABLE OF CURRENT SMOKING STATUS BY SEX

	Ex-smokers	Current Smokers	Total
Male	7	21	28
Female	15	44	59
Total	22	65	87

Independence was tested with a chi square statistic (d.f.=1) and was not found to be significant at the alpha=0.05 level.

APPENDIX 4

TABLE OF CURRENT SMOKING STATUS BY AMOUNT SMOKED BEFORE CAMPAIGN

TABLE OF CURRENT SMOKING STATUS BY AMOUNT SMOKED BEFORE CAMPAIGN

	Ex-smokers	Current Smokers	Total
0-20 Cigs./Day	13	33	46
21-40 Cigs./Day	7	26	33
41+ Cigs./Day	2	6	8
Total	22	65	87

Independence was tested with a chi square statistic (d.f.=2) and was not found to be significant at the alpha=0.05 level.

APPENDIX 5

TORONTO DAILY STAR REPORT OF SURVEY

Toronto Star, A13, July 14, 1983.

Most city smokers failed quit challenge

By Christopher Chenoweth
Toronto Star

Only one of four Toronto smokers who pledged to quit smoking in the Great Cold Turkey Challenge have stayed off cigarettes, a Toronto public health survey shows.

About 2,200 Torontonians swore off cigarettes during the month-long Cold Turkey contest last January.

However, a survey of those professed nicotine quitters found that six months later only 25 per cent had managed to stay away from smoking permanently, the Toronto Public Health Department announced.

Health chairman

Although Alderman Anne Johnston also failed to keep her promise to quit, the chairman of the health board said she was pleased by the contest's results and says the city will sponsor another Cold Turkey contest next year.

"I just couldn't do it. I was in absolute agony for the whole three days I managed not to smoke," said Johnston, a two-pack-a-day smoker who vowed on Weedless Wednesday, last Jan. 26, to give up her nicotine habit.

"I only lasted until Friday night because friends from the health department stayed with me most of the three days to give me support. But once they left me alone Friday night, I lit up a cigarette and I was hooked again."

A public health telephone survey of 617 avowed tobacco abstainers found that only 104 Metro residents who pledged to quit during the Cold Turkey contest actually managed to do so after six months.

However, Toronto public health spokesman Anne Moon called this success rate "absolutely fantastic."

"This is an incredible success rate. It's the first time the city has run the contest, and I'm delighted by the results," Moon said.

The anti-smoking contest results also found:

- Eighty-two per cent of those who successfully quit smoking did it cold turkey.
- People whose husband or wife quit with them had the best chance of beating the smoking habit. "The people who were getting gentle nudges from the people they loved were the ones who had the best success rate," Moon said.
- More women then men, by a 2-1 margin, successfully stayed off cigarettes.
- The average successful quitter was a 36-year-old smoker who started puffing at 18.
- The ones who successfully quit smoked an average of 21 butts a day (about a pack), while heavier smokers (over 26-a-day cigarette puffers) were the least successful quitters.

"Over two-thirds of the people surveyed found it really hard to quit, and over 80 per cent of those who made it were actually smoking brands with a medium or heavy tar and nicotine content," Moon added.

The first-ever Cold Turkey contest run in Toronto cost $10,000 and was the result of a challenge from the city of Vancouver, which ran its own anti-smoking contest the year before.

Outpledged Vancouver

Toronto out-pledged Vancouver in the 1983 campaign, 2,203 to 1,445, but Vancouver did not undertake a follow-up survey to see who had stuck to their promises.

But even though CN Tower manager David Garrick failed in his pledge to quit as a nicotine-addict, he intends to keep trying.

"I've tried Smoke Enders, a six week course on quitting, but I couldn't last," said Garrick, a pack-and-a-half-a-day addict who is the chairman of Toronto's sesquicentennial celebrations.

"I've even stopped for seven months on a bet, but the minute I collected I lit a butt right away."